AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0051] as follows:

[0051] A similar process can be used for selecting a pre-defined segmentation for a line-end. For example, the system can select between a line extension correction and a dog-ear serif correction. The two correction features are illustrated in FIGs 6A and 6B. As is illustrated in FIG. 6A, a dog-ear serif correction divides the line-end of line feature 602 into three correction segments of length W nm, and also divides the adjacent edges into short segments designated by run length of X nm. As is illustrated in FIG. 6B, a line-end extension correction on line feature 604 uses a single segment of length Y nm on the line-end, and Z nm segments on the edges adjacent to the line-end. When properly placed, there is little correction performance difference between the two features, but a significant segment count reduction when using the line-extension correction. Note that the segment lengths W, X, Y and Z can be varied based on design, desire, and process.

Please amend paragraph [0053] as follows:

[0053] The dissection test set example in FIG. 7 illustrates the process for mapping gradient angles to dissection length requirements. Exemplary results of this effort are presented in the table which appears in FIG. 8. In particular, FIG. 7 illustrates a pattern prior to correction, with post-correction edge wire frame diagrams of features 705-708. The area highlighted in region 701 of feature 705 has large correction shifts applied to each correction and inspection of the gradient angles reveals angles from 45 to 75 degrees and 105 and 135 degrees. The correction in area 702 of feature 707 contrasts with that in area 701, revealing almost no variation in the correction shift applied over the regions. When the gradient angle is checked over this region, it is found to move between approximately 90.1 and 89.9 degrees. (Note, the angle values in these examples may change based on need and are only illustrative.)

Please amend paragraph [0054] as follows:

[0054] Areas 703 and 704 on feature 708 are more marginal cases, where the potential for some longer segments exist, but variation is necessary to produce an adequate correction. In area 704, the gradient angle varied from 85 to 95 degrees and the segments had small correction changes over several segments. In area 703, the gradient angle was between 80 and 100 degrees, but it had significantly more correction shifts than were present in area 704. Therefore, area 703 angles were binned with area 701 angles, but area 704 was binned into its own angle region with an intermediate segment length.

Please amend paragraph [0057] as follows:

[0057] A model-based dissection produces significantly different results than a rules-based dissection. For example, FIGs. 9A–9C compare results of a model-based dissection against a rules-based dissection for the feature edge in accordance with an embodiment of the invention. FIG. 9A presents results of an initial gradient data-gathering step on feature 904 with vectors plotted at sampling points on the feature edge facing feature 902. FIG. 9B illustrates a segmentation of the feature edge of feature 908 facing feature 906, which uses rule-based dissection. In contrast, FIG. 9C illustrates model-based segment sizing of the feature edge of feature 912 facing feature 910 based upon intensity gradients in accordance with an embodiment of the invention. Note that the area with large angular deflections receives shorter segments, while those with perpendicular vectors are merged into one segment.